

Good turnout at alternate fuel trial open day underscores promising future of green initiative

NPC-CIMPOR at Simuma not reinventing the wheel – just finding new uses for old tyres

Last Wednesday, the NPC-CIMPOR cement plant at Simuma held an open day to give interested and affected parties an opportunity to see the progress of their ongoing alternate fuel trials. The day was widely seen as a success as a strong turnout of some 50 people representing NGOs, industry, government and the community attended the event. The group toured the plant and were able to witness firsthand the tyre-burning tests.

Successful and environmentally positive results are widely expected from the trials. When all the test data has been analysed, the trial, which runs through Friday August 27th, is expected to demonstrate that burning waste tyres as fuel at Simuma is as favourable environmentally as it is in the EU and the United States. In some areas globally, this more cost-efficient fuel option, known as co-processing of tyres and coal has been in place for decades.

Necessary trials

A Plan of Study for the EIA, or environmental impact assessment, together with a “trial burn protocol” was necessary before testing could begin. The NPC-CIMPOR team, which includes on-staff environmental specialists, compiled and submitted these documents to the relevant authorities. Having received approval to proceed, preliminary tests were completed before the current longer trial burn at



All smiles at the open day: (from left) Enjoying the function at the Oribi Gorge Hotel during the open day are (from left) Vanessa Weyer of SRK Consulting, Brendon Pillay of uMoya-NILU, Jenny Ravenscroft of NPC-CIMPOR, Ian Naidoo, Bavashnee Naidoo of NPC-CIMPOR, Mary Neethling (local historian), Chantelle Howlett of NPC-CIMPOR, Dr Mark Zunckel of uMoya-NILU, Vis Reddy, Giovanni Lodetti and Cliffy Naidoo of NPC-CIMPOR.

Simuma could be started, marking the high point of a research and compliance process that began years ago with a scoping report and the EIA.

Preliminary testing this past week, using sophisticated equipment to measure emissions from the cement kiln was done, both with the existing fuel, which is coal, and with the mixture of co-processed coal and waste tyres. The emission monitoring, both continuous and discontinuous, was performed in cooperation with on-site government representatives and external consultants. The actual emission measurements are being conducted by an independent company.

Environmental advantages

In earlier articles it was noted how the consumption of waste and rejected tyres, which have not been selected for re-treading, has a multi-faceted beneficial environmental effect. Firstly, many thousands of waste tyres a month will not end up in KZN landfills, which are constantly growing in size. During the test period alone, two tyres per minute were co-processed. This totals 2 880

tyres per day. Even more significant perhaps, is the savings in non-renewable resource usage – a savings of 10 tons of coal is being realised daily during the trials. Another conservational plus is that, when the data is analysed, it is anticipated that the co-processed tyres and coal will present a somewhat better overall emissions profile than coal alone.



Governmental oversight: Seen at the open day are (from left) Jay Puckree of KZN Department of Agriculture, Environmental Affairs & Rural Development (DAEARD), Noloyiso Nkqeto of Ugu District Municipality, Bhekisisa Khumalo of Ugu Environmental Health, Dr Timothy Fasheun, Sarah Allan, Melissa Puckree, Mlu Binda of KZN DAEARD, Giovanni Lodetti of NPC-CIMPOR and Karoon Moodley of the Department of Mineral Resources



Waste put to good use: Tyres are hoisted up to the testing area during the alternative fuel trials at the NPC-CIMPOR cement plant at Simuma recently. As the picture shows, a vast number of reject and waste tyres can be redeemed as even the trials consumed about 2880 tyres per day.